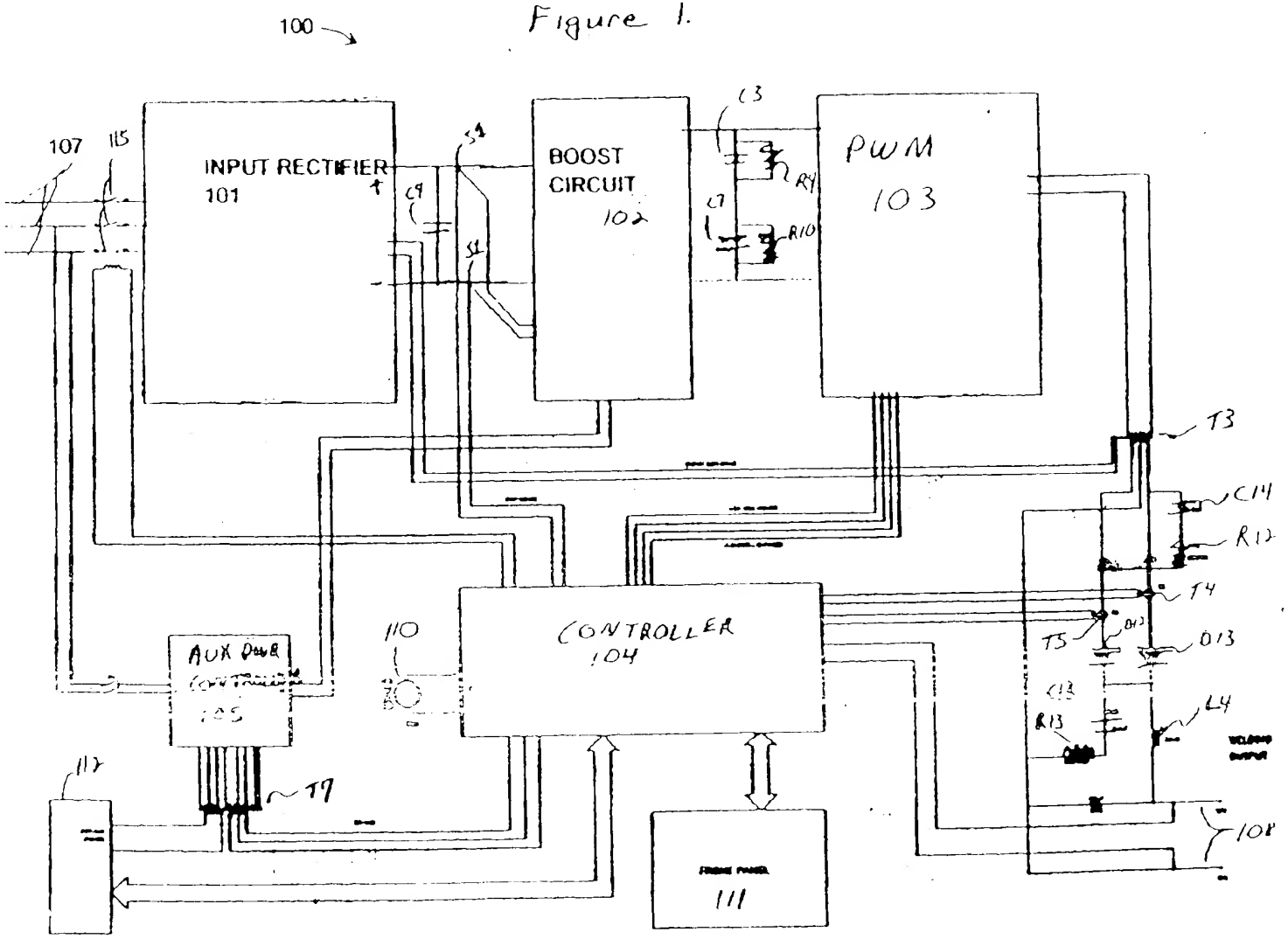
Figure 1.


100
107
115
INPUT RECTIFIER
101
C9
S1
S2
BOOST
CIRCUIT
102
C3
R9
C7
R10
PWM
103
T3
C14
R12
T4
T5
D12
D13
C13
R13
L4
110
CONTROLLER
104
AUX PWR
CONTROLLER
105
T9
117
FRONT PANEL
111
101

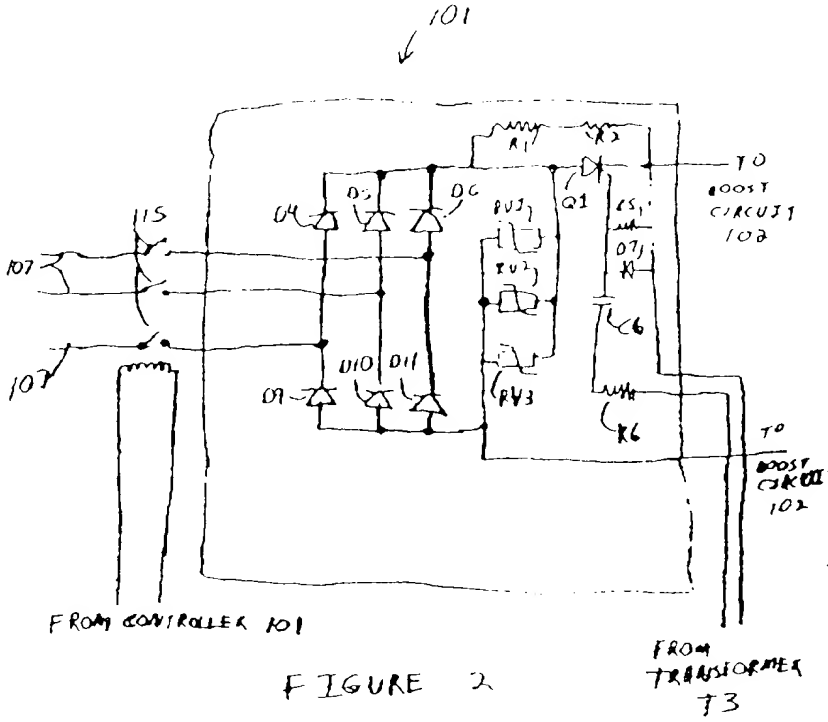
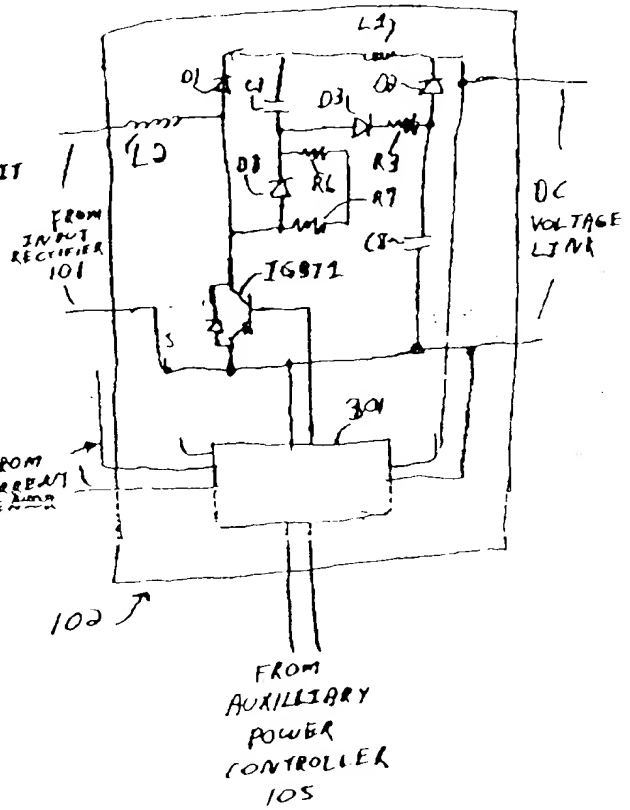


FIGURE 2

FIGURE 3



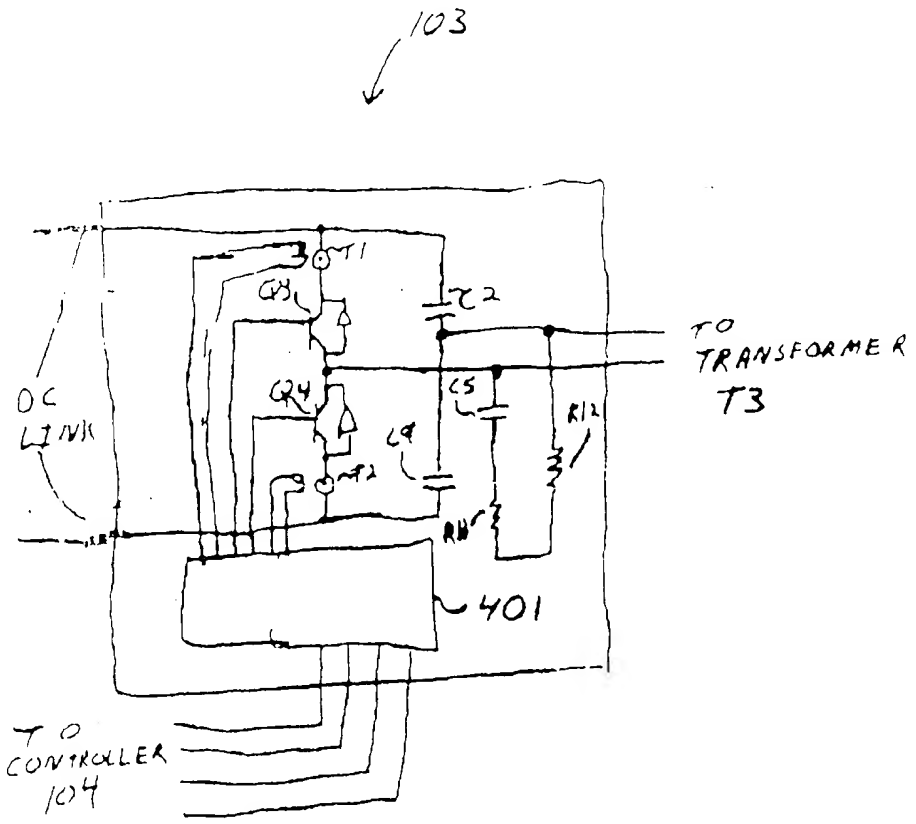

103
T1
Q3
C2
TO
TRANSFORMER
T3
Q4
C5
R12
C9
T2
DC
LINK
R11
401
TO
CONTROLLER
104

FIGURE 4

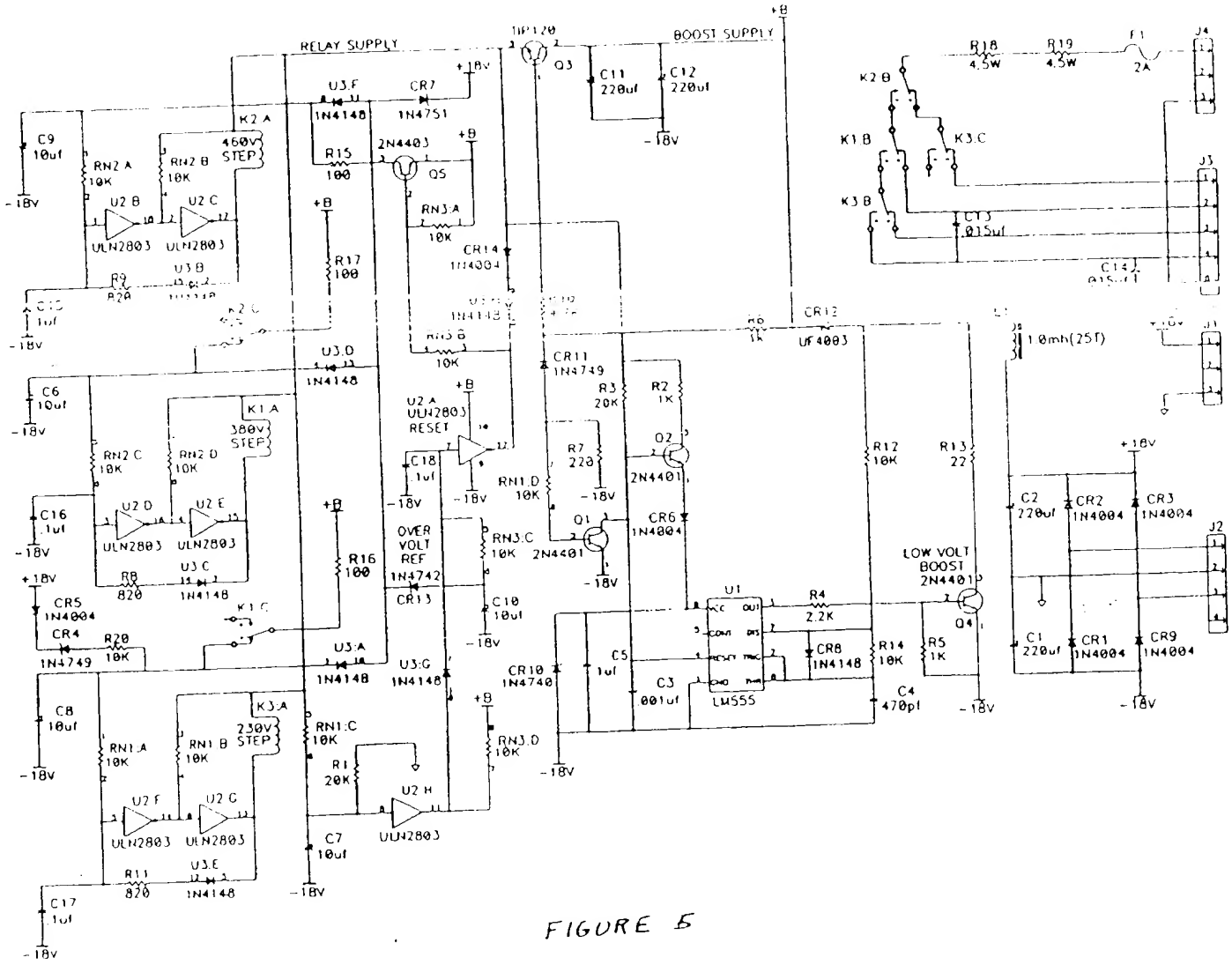

RELAY SUPPLY
BOOST SUPPLY
+B
-18V
TIP120
Q3
C11 220uf
C12 220uf
K2 A
460V STEP
C9 10uf
RN2 A 10K
RN2 B 10K
U2 B
U2 C
ULN2803
R9 820
U3 B
1N4148
C15 1uf
R17 100
U3 F
1N4148
CR7 1N4751
R15 100
2N4403
Q5
RN3 A 10K
CR14 1N4004
U3 D
1N4148
RN3 B 10K
CR11 1N4749
R3 20K
R7 220
RN1 D 10K
C18 1uf
U2 A ULN2803 RESET
OVER VOLT REF 1N4742
CR13
RN3 C 10K
C10 10uf
Q1 2N4401
CR6 1N4004
R2 1K
Q2 2N4401
R12 10K
R13 22
CR12
UF4003
R18 4.5W
R19 4.5W
F1 2A
K2 B
K1 B
K3 C
K3 B
C13 .015uf
C14 .015uf
J4
J3
J1
1.0mh(25T)
K1 A
380V STEP
C6 10uf
RN2 C 10K
RN2 D 10K
U2 D
U2 E
ULN2803
C16 .1uf
R8 820
U3 C
1N4148
R16 100
K1 C
CR5 1N4004
CR4 1N4749
R20 10K
U3 A
1N4148
U3 G
1N4148
U1
LM555
R4 2.2K
CR8 1N4148
R14 10K
R5 1K
C4 470pf
C3 .001uf
C5 1uf
CR10 1N4740
LOW VOLT BOOST 2N4401
Q4
C2 220uf
CR2 1N4004
CR3 1N4004
C1 220uf
CR1 1N4004
CR9 1N4004
J2
C8 10uf
K3 A
230V STEP
RN1 A 10K
RN1 B 10K
RN1 C 10K
R1 20K
U2 H
ULN2803
RN3 D 10K
C7 10uf
U2 F
U2 G
R11 820
U3 E
1N4148
C17 1uf

FIGURE 5